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# QUALITY ASSURANCE OFFICE
# INSPECTION REPORT

QA CHARGE NCY54
MEP D-5706
AFE NCY54

JOB Modify Burners at I.P.P. Unit #1

CONTRACTOR Babcock & Wilcox LOCATION Paris, Tx

LEAD ENGINEER Mr. R. Krikorian LOCATION GOB

SPO NOS. _____ ITEMS COVERED Burners

ACTIVITY Fabrication Insp. REPORT PERIOD 2/3 - 2/7/92 REPORT 1

## SUMMARY


Work Progress and Quality

Work by Babcock & Wilcox (B&W) is progressing well on the Fabrication of replacement burners for I.P.P. Unit #1. The quality of work has been good so far.

More Signifcant Items

Several corrections and modification are covered in the detail section of this report. It should be noted that these are burners of a new design and some additions, corrections and modifications would be considered normal.

Schedule Status

The assembly of the burners is going well and it is possible that the first shipment could be one week ahead of schedule.


## DETAILED REPORT

During the period February 3, 1992 through February 7, 1992. A quality assurance inspection trip was made to the Paris, Texas shop of Babcock and Wilcox (B&W). The purpose of this trip was to inspect the first of forty-eight new coal burners for I.P.P. Unit #1.

Present at the plant was Mr. Bruce DeLagrange, B&W's burner design engineer from Barberton, Ohio.

Tuesday, February 4, 1992

The first burner is nearly complete and ready for final inspection on Wednesday. An inprocess inspection was made by the

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DWP QA engineer. During this inspection it was noted the tips of some of air vanes were close or touching the air vane clamp and operating shaft assembly of the adjacent air vane. This was immediately corrected by B&W by grinding the vane tips to a tighter radius. On future burners this area will be checked. It should be noted that air vanes are purposely given a loose fit and must be checked on a vane by vane basis.

The overall quality of the burner looked very good. The air registers, air vanes, and air zone damper were operated by the DWP-QA engineer. The ease of movement was very good.

A meeting was held with Mr. Jerry Langley burner and pulverizer QA supervisor. A copy of written burner inspection sheet was received and reviewed. No exceptions were noted.

Wednesday, February 5, 1992

The first burner was inspected by B&W QA with the DWP QA engineer. During this inspection it was noted that the rear plate of the zone damper may bind against the stiffener bars. Mr. DeLagrange added a note to the drawings requiring this plate to be checked at assembly and notches to be cut if clearance is to tight.

It was found during the inspection that the lower gusset plate from the coal nozzle to the back plate of the air zone damper assembly would interfer with the existing field support steel. The installed gusset was cut in place, removing 4" of the gusset. The remaining gussets for the other burners were sheared prior to installation. Corrections were made to the detail drawings.

The question of clearance between the coal nozzle flange and the ignitor assembly flange in the burner cover plate brought up during the January 16, 1992 meeting with IPP was discussed with Mr. DeLagrange. It was decided to fit the ignitor pipe into the burner and see how much additional opening would be needed to assure clearance of ignitor pipe with flange. This was done on Thursday, February 6, 1992. The trial fit revealed that the opening would have to be 1/4-inch larger. This increase would be added toward the outside radius of the existing opening. A "scab" plate was also added so that the erector could make the final adjustment in the field then seal weld the ignitor pipe and scabe plate to the cover assembly.

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Thursday, February 6, 1992

Ignitor work completed as described above. Assembly of burner No. 2 is nearly 95 percent complete. No. 3 is 90 percent complete and No. 4 is 80 percent complete.

During an inprocess inspection of burner No. 3 by the DWP QA engineer it was found that one of the stiffener bars on the air zone damper assembly was bent 1/2". This stiffener bar was cut loose at the back plate of the air zone damper assembly, straightened and rewelded. An inspection of stiffener bars to be used for the remaining burners found other bars bent, the worst found by the DWP QA engineer was 1" bend over the length of a 3' 6 3/8-inch bar. B&W was requested to reinspect each bar and straighten any that were out of tolerance.

Dimensional spot checks were made by the DWP QA engineer of the other burners in assembly with no deficiencies noted.

Friday, February 7, 1992

The first burner has been set on it's shipping pallet and strapped down. The air register vane linkage was removed and packaged for shipping. The register vanes have been wired in the fully open position for shipping.

In preparation for shipping B&W attempted to weight the first burner. Due to the size and configuration of the burner assembly the actual weight of the unit could not be determined. This condition raised a question as to what the difference in weight is between the old burner and the new one. This could be of concern with regard to the existing support structure in the boiler. The weight question has been referred to B&W.

Painting of shipping braces with yellow paint was checked and found to be correct. The rotation designation of the burners will be stenciled on both sides of the coal nozzle and the base plate with the initials "CCW" counter clockwise or "CW" clockwise. The lifting lugs for the burners are painted silver.

The second burner has been inspected and accepted by B&W QA, and is being prepared be painting.

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The burner assembly operations are proceeding faster than expected. It may be that the first shipment could be ready by February 21, 1992 which would be a week ahead of schedule.

JEA:wlm

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